

General Chemistry I
Problem Set 1
Due Wednesday, September 14, 2005 (at 5 p.m.)

Total points for this assignment = 46. However, your eight highest problem set scores will be equally weighted in computing the homework portion of your cumulative score.

For the math problems, remember to show in writing the process by which you have obtained your answers. In particular, for this assignment, your work should justify the number of significant figures you report in your final answer.

Final numerical answers must contain the correct number of significant figures (see pp. 25-29 of Silberberg and the class handout for rules) and have the right physical units attached to receive full credit. Remember to include at least one additional non-significant figure for any intermediate result you write down—this minimizes rounding error.

1. Problem 1.59 (on Silberberg p. 35) (6 points)
2. Problem 1.67 (6 points)
3. Problem 2.40 (4 points)
4. Problem 2.46 (4 points)
5. Problem 2.48 (7 points)
6. Problem 2.67 (4 points). Note that you must (briefly) explain your answer.
7. Problem 2.69 (4 points). Although Silberberg does not ask you for this, I want you to briefly justify your answers.
8. Problem 2.89 (4 points)
9. Problem 2.91 (4 points)
10. Problem 2.93 (3 points)